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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/489,864	01/24/2000	Allan L. Samson	5010/097	6357

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EXAMINER	
SIMITOSKI, MICHAEL J	

ART UNIT	PAPER NUMBER
2134	

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/489,864	SAMSON ET AL.	
	Examiner	Art Unit	
	Michael J Simitoski	2134	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on 22 October 2003.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) 1-44 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) 1-44 is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on 22 October 2003 is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

13)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

a) ☐ The translation of the foreign language provisional application has been received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

NORMAN M. WRIGHT
PRIMARY EXAMINER

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

1. Claims 1-44 are pending.

2. The response of October 22, 2003 has been received and fully considered.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1-3, 8, 9, 34-36, 41 and 43 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,388,690 to Lumsden. Lumsden discloses a system comprising signal conditioning circuitry/automatic meter-reading transponder with sensors (transponder scans alarm inputs) (see col. 1, lines 43-46), having a processor and memory, which stores current utility consumption data and transmits the data, along with identification information from its storage to a host system/central computer upon receiving instructions from the host system/central computer to do so (see col. 2, lines 17-38). Each particular signal conditioning circuitry/transponder is allotted a customer identification code upon initialization, after which the host/central computer begins requesting readings and storing data in memory. The host system/central computer scans each transponder periodically and receives authentication information (identification code and usage data) and from the transponder (see col. 2, lines 44-68, col. 3, lines 1-30 & col. 4, lines 44-59). The host/central computer monitors the readings of each transponder and if, for example, the client's usage is above a predefined peak level, the

central computer can send a load shed command/alarm/error signal to the transponder (see col. 1, lines 10-42, col. 2, lines 17-38, col. 4, lines 44-67 and col. 5, line1-6).

5. Claims 5 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 5,014,038 to Leigh-Monstevens et al. (Leigh-Monstevens). Lumsden discloses a metering system as described above, but lacks terminating the operation of the system. Leigh-Monstevens teaches that in a vehicle intrusion detection system, it is advantageous to disable the starter circuit upon absence of a signal representative of a valid user of the vehicle to gain the benefit of an inexpensive method of preventing further theft (see col. 2, lines 57-66). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to terminate distribution of a utility upon detecting of tampering so as to inexpensively prevent possible further theft, as taught by Leigh-Monstevens (see col. 2, lines 57-66). One of ordinary skill in the art would have been motivated to perform such a modification to inexpensively prevent possible further theft.

6. Claims 4, 10, 11, 37, 42 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 6,289,456 to Kuo et al. (Kuo).

Regarding claims 4, 11, 37 and 44, Lumsden discloses a meter-reading system as described above, but lacks the permanent recording of information over time. Kuo teaches that creating a log, or record, of a change in state (indicating a possible intrusion) is beneficial because it creates a history that allows an indication of whether or not an administrator is aware of the event (see col. 4, lines 21-27). Therefore, it would have been obvious to one having

ordinary skill in the art at the time the invention was made to modify Lumsden's system to keep a history of authentication data read from the signal conditioning circuitry/transponder so an interested party is informed of all events that have occurred, as taught by Kuo (see col. 4, lines 21-27). One of ordinary skill in the art would have been motivated to perform such a modification so an interested party is informed of all events that have occurred.

Regarding claims 10 and 42, Lumsden discloses a system as modified above, but lacks including a time stamp in a record of information received. Kuo teaches that including a timestamp in a record of intrusions is beneficial because it allows an investigator to narrow a theft occurrence down to some specific time frame (see col. 2, lines 40-57). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to record a timestamp in the record of data read from the transponder to narrow down an intrusion to a specific time frame and hence reduce the number of possible suspects in a theft, as taught by Kuo (see col. 2, lines 40-57). One of ordinary skill in the art would have been motivated to perform such a modification to narrow down an intrusion to a specific time frame and hence reduce the number of possible suspects in a theft.

7. Claims 6 & 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 4,933,668 to Oyer et al. (Oyer). Lumsden discloses a system that has an initial value to use for comparison (identification code and usage data) to a recorded value, as described above, but lacks the host/central system obtaining initial information from the remote unit. Oyer teaches performing an initial calibration in a security system where a central unit polls sensors to detect those currently connected to the system an to retrieve an initial value from

each, stores the initial value and then later polls for a present value to determine if a difference in the present and initial values exists (see col. 3, lines 11-35). Oyer teaches that this calibration is beneficial because the system is reliable in varying conditions, which are to be seen by the system as normal, and because the system configuration can be altered, by authorized personnel, without major system modifications (see col. 1, lines 26-59). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Lumsden's system to include an calibration step where initial values are collected to be later compared to readings, to gain the benefit of system performance in varying conditions and the simplistic, authorized changing of configuration, as taught by Oyer (see col. 1, lines 26-59 & col. 3, lines 11-35). One of ordinary skill in the art would have been motivated to perform such a modification to gain the benefit of system performance in varying conditions and the simplistic, authorized changing of configuration.

8. Claims 39 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Leigh-Monstevens et al. in further view of Oyer et al. Claims 39 and 40 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 39 and 40 are rejected by a similar rationale.

Response to Arguments

9. Applicant's changes to the drawings and specification have been received and accepted.

10. Applicant's amendment to claim 44 to overcome the rejection under 35 U.S.C. 112, second paragraph has been accepted.

11. Applicant's statement of common ownership of the Mansfield reference is noted, however the statement is improper because applicant has not stated that the instant application and the Mansfield reference were commonly owned at the time the invention was made.

12. Applicant's arguments filed October 22, 2003 have been fully considered but, regarding claims 1 & 34, are not persuasive.

Regarding claims 1 & 34, applicant suggests that the Lumsden reference does not detect and prevent tampering, however, this argument only argues intended use of the invention. Further, applicant suggests that the Lumsden reference does not teach the limitation "instructions for directing said processing unit in said host system to periodically transmit a request for authentication information from said signal conditioning circuitry". However, applicant is directed to col. 2, lines 30-38, where Lumsden states that the transponders are scanned approximately every thirty seconds. The authentication data (identification code and usage data) are communicated with a unique decoding/encoding system (see col. 2, lines 44-68, col. 3, lines 1-30 & col. 4, lines 44-59). Lumsden further discloses each transponder having an identification code word that is compared/authenticated each time an instruction word is sent to determine whether to accept the instruction word (see col. 2, lines 50-55). The rejections of claims 1-3, 8-9, 34-36, 41 & 43 are maintained.

Claim Rejections - 35 USC § 103

13. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

14. Applicant's arguments with respect to claims 12-33 have been considered but are moot in view of the new ground(s) of rejection.

15. Claims 12-14, 19-20, 23-25, 30 and 31 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of U.S. Patent 6,526,839 to Barger et al. (Barger) in further view of U.S. Patent 3,355,944 to Sipin.

Regarding claims 12 & 23, Lumsden discloses a meter system as modified above, but lacks disclosure of meter electronics for a Coriolis flowmeter and lacks pick-off sensors affixed to the Coriolis flowmeter. However, Sipin teaches that Coriolis-type flowmeters are used because of their low resistance to flow and lack of moving parts (see col. 1, lines 1-31). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis-type flowmeter because of their low resistance to flow and lack of moving parts, as taught by Sipin (see col. 1, lines 1-31). Sipin discloses one tube through which material flows (see Fig. 1), a driver (see Fig. 6, element 82) affixed to the tube that vibrates the tube as the material flows through the tube (see Fig. 6, elements 57 & 58 & col. 6, lines 31-49) and sensors affixed to at least two different points of the tube indicating vibrations at

of the tube at the two points (see Fig. 9, elements 83 & 84 & col. 7, lines 1-23). Sipin further discloses that the Coriolis type flowmeter uses the sensors to measure parameters/the mass flow of fluent matter (see col. 1, lines 8-11 & col. 1, liens 19-23). Lumsden, as modified, lacks pick-off sensors affixed to the Coriolis flowmeter. However, Barger teaches that "typical known devices use pick off sensors" (see col. 1, lines 57-67). The flowmeter measures mass flowing through a tube (see col. 5, lines 62-67 & col. 6, lines 1-14). Therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to use a Coriolis flowmeter, as taught by Sipin, and to use pick-off sensors, as taught by Barger, to measure flow in Lumsden's metering system. One of ordinary skill in the art would have been motivated to perform such a modification to gain the benefits of Coriolis flometers' lack of moving parts and low resistance to flow, as taught by Sipin and Barger. Regarding claims 13 and 24, the claims are substantially equivalent to claim 2. Therefore, claims 13 and 24 are rejected by a similar rationale (see Sipin, col. 1, lines 8-11 & col. 1, liens 19-23) and (see Barger, col. 1, lines 57-67).

Regarding claims 14 and 25, the claims are substantially equivalent to claim 3. Therefore, claims 14 and 25 are rejected by a similar rationale.

Regarding claims 19 and 30, the claims are substantially equivalent to claim 8. Therefore, claims 19 and 30 are rejected by a similar rationale.

Regarding claims 20 and 31, the claims are substantially equivalent to claim 9. Therefore, claims 20 and 31 are rejected by a similar rationale.

16. Claims 16 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, in further view of Leigh-Monstevens. Claims 16 and 27 are substantially equivalent to claim 5 and are therefore rejected by a similar rationale.

17. Claims 15, 21, 22, 26, 32 and 33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, in further view of Kuo et al.

Regarding claims 15 and 26, the claims are substantially equivalent to claim 4. Therefore, claims 15 and 26 are rejected by a similar rationale.

Regarding claims 21 and 32, the claims are substantially equivalent to claim 10. Therefore, claims 21 and 32 are rejected by a similar rationale.

Regarding claims 22 and 33, the claims are substantially equivalent to claim 11. Therefore, claims 22 and 33 are rejected under similar rationale.

18. Claims 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin in view of Leigh-Monstevens, in further view of Oyer. Claims 17 and 18 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 17 and 18 are rejected by a similar rationale.

19. Claims 28 and 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lumsden in view of Barger in view of Sipin, in further view of Oyer. Claims 28 and 29 are substantially equivalent to claims 6 and 7, respectively. Therefore, claims 28 and 29 are rejected by a similar rationale.

Conclusion

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Simitoski whose telephone number is (703)305-8191. The examiner can normally be reached on Monday - Thursday, 8:00 a.m. - 5:30 p.m.. The examiner can also be reached on alternate Fridays from 8:00 a.m. – 4:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse can be reached on (703)308-4789.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks
Washington, DC 20231
Or faxed to:
(703)746-7239 (for formal communications intended for entry)
Or:
(703)746-7240 (for informal or draft communications, please label "PROPOSED" or "DRAFT")
Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive, Arlington, VA 22202, Fourth Floor (Receptionist).

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

MJS
16 December 2003

NORMAN M. WRIGHT
PRIMARY EXAMINER